Figure 1: Biacore analysis to measure ClfA binding and subsequent binding/inhibition of fibrinogen when Mabs 13-1 or 13-2 are bound to the chip using rabbit anti-mouse Fc (RAM-Fc) antibody.

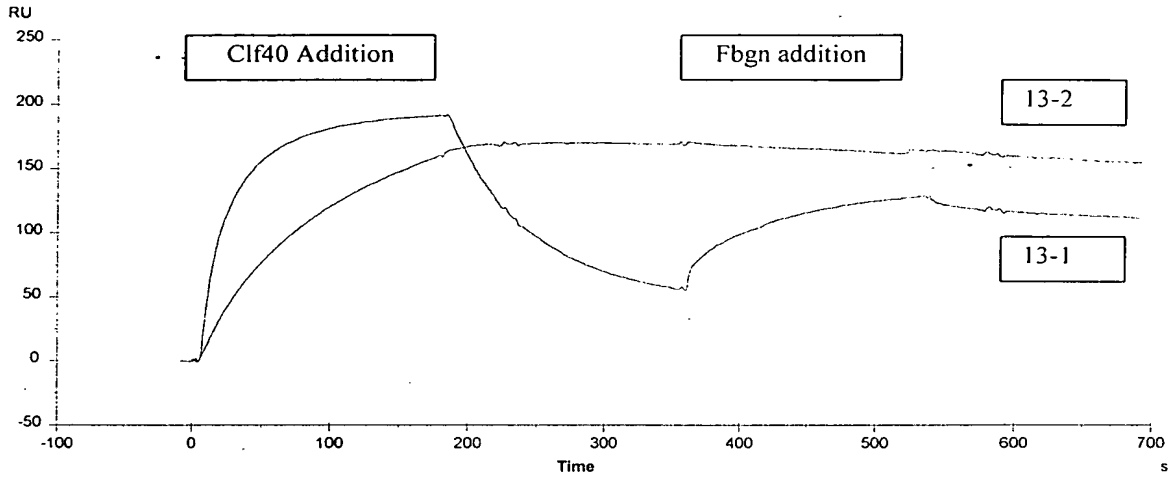
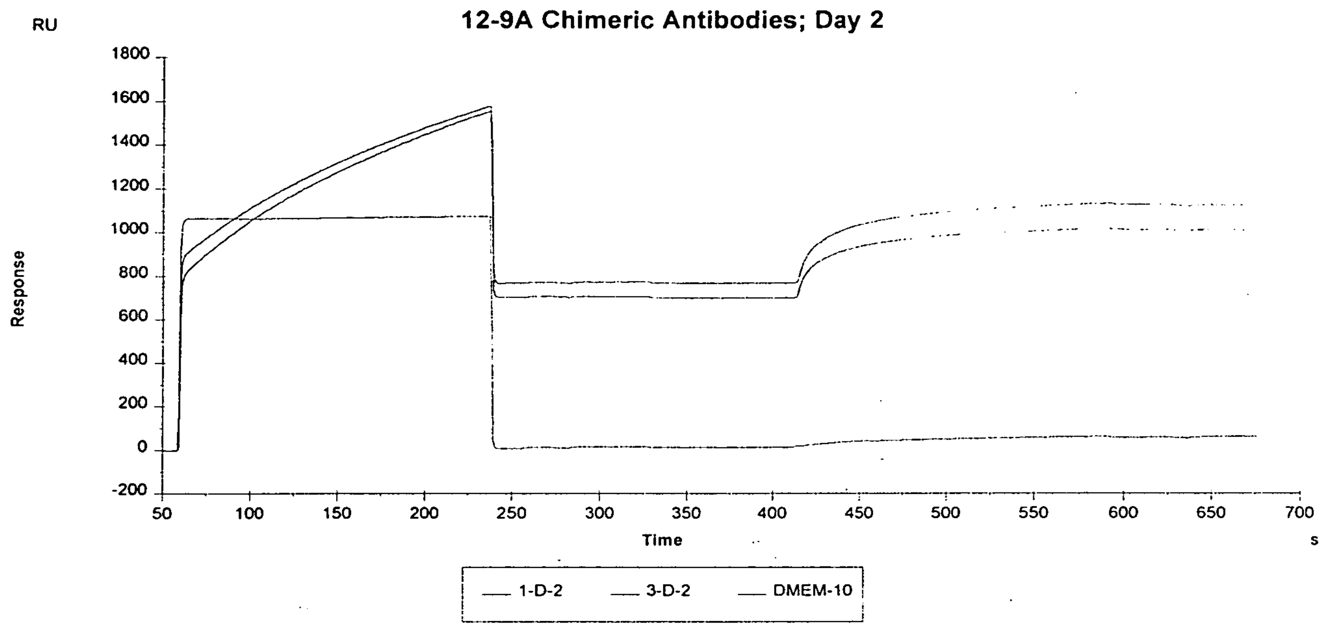


Figure 2. Biacore Analysis of Chimeric 12-9.



Chimeric mAb capture

Binding of ClfA to chimeric mAb

Figure 3. Flow Cytometric Analysis of Chimeric 12-9 Binding to *Staph aureus* Strain Newman

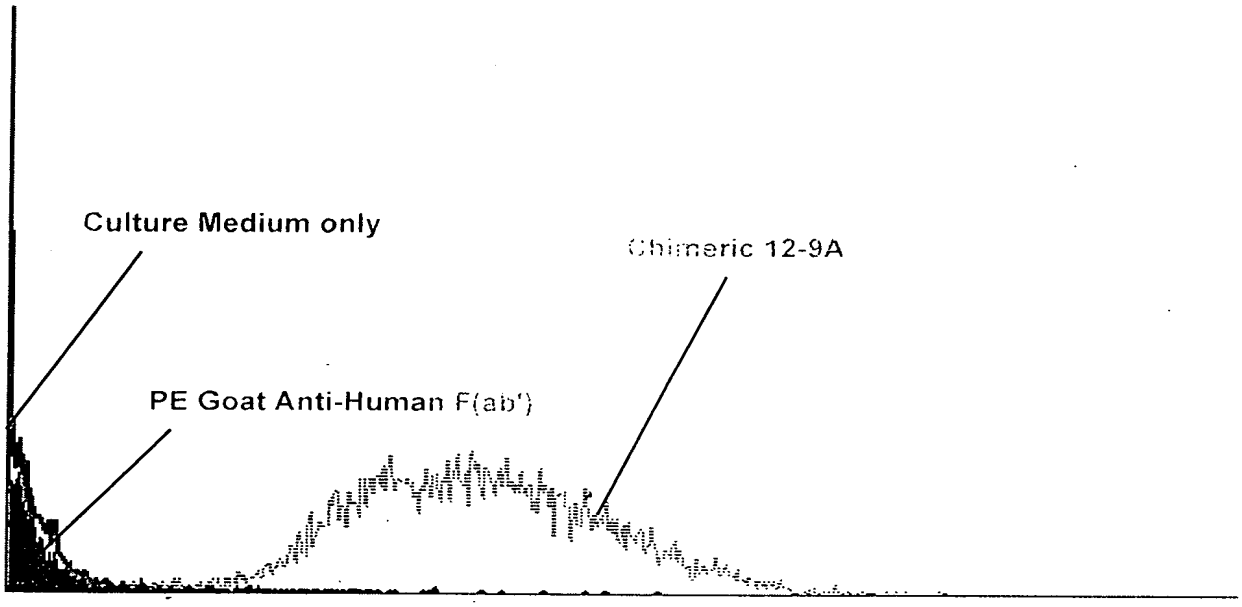


Figure 4: Binding Affinity of Chimeric and Humanized 12-9 to ClfA

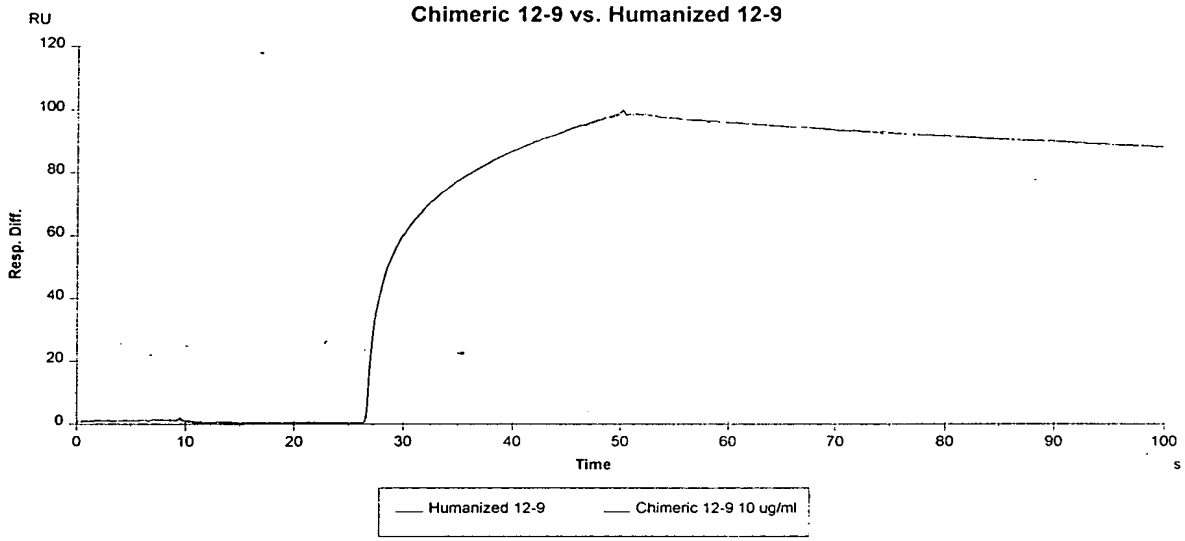


Figure 5. Protection in the Murine S. aureus Lethal Challenge Model

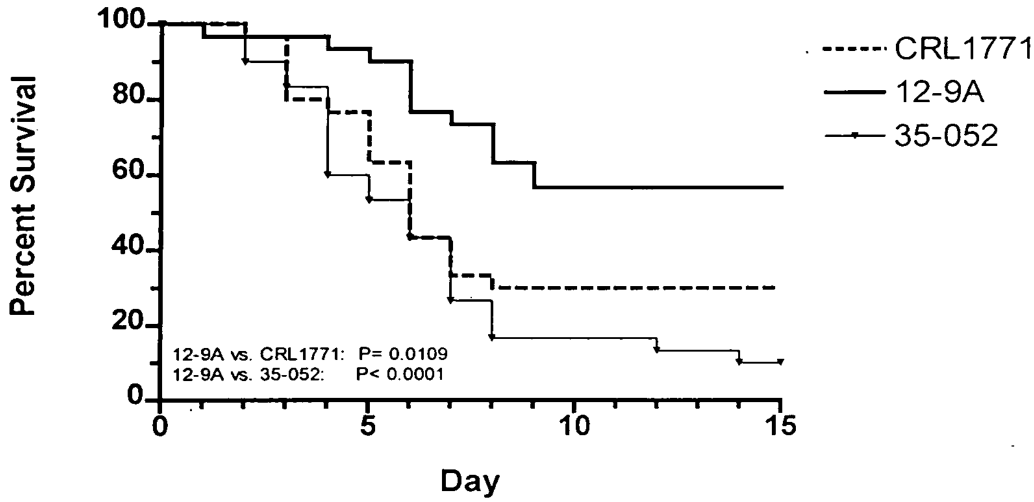


Figure 6. Whole Cell Inhibition of *S. aureus* Adherence to Immobilized Fibrinogen

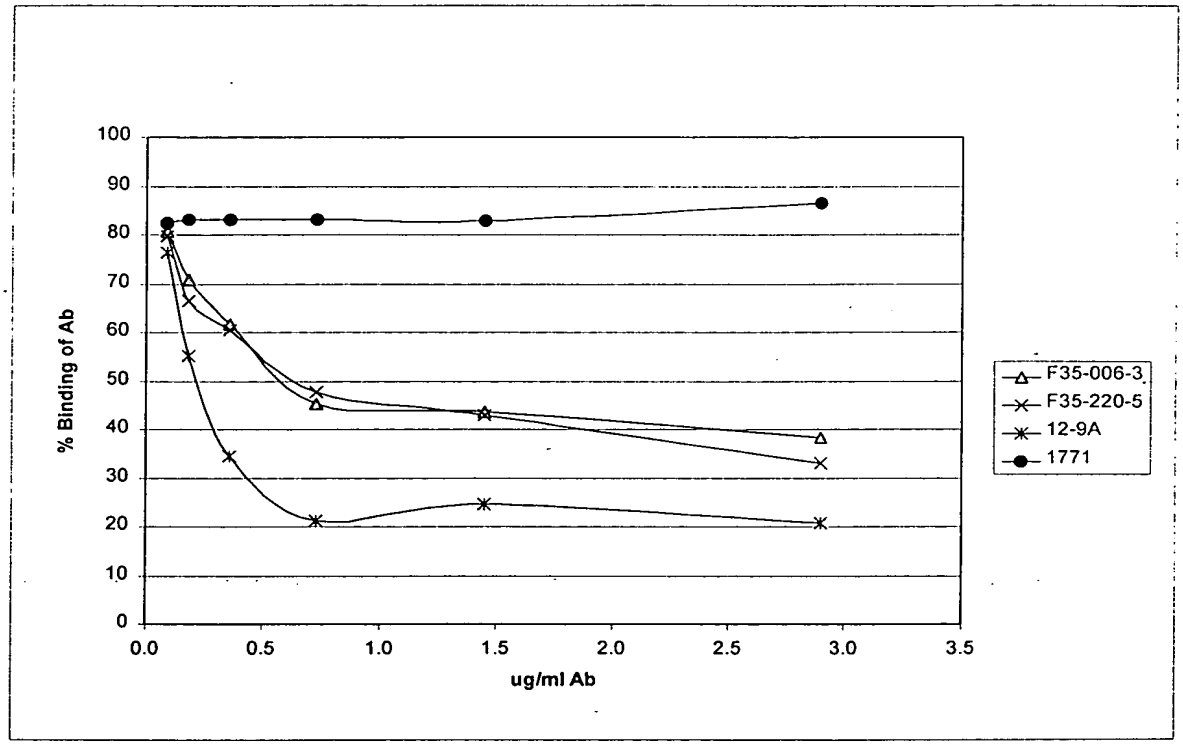
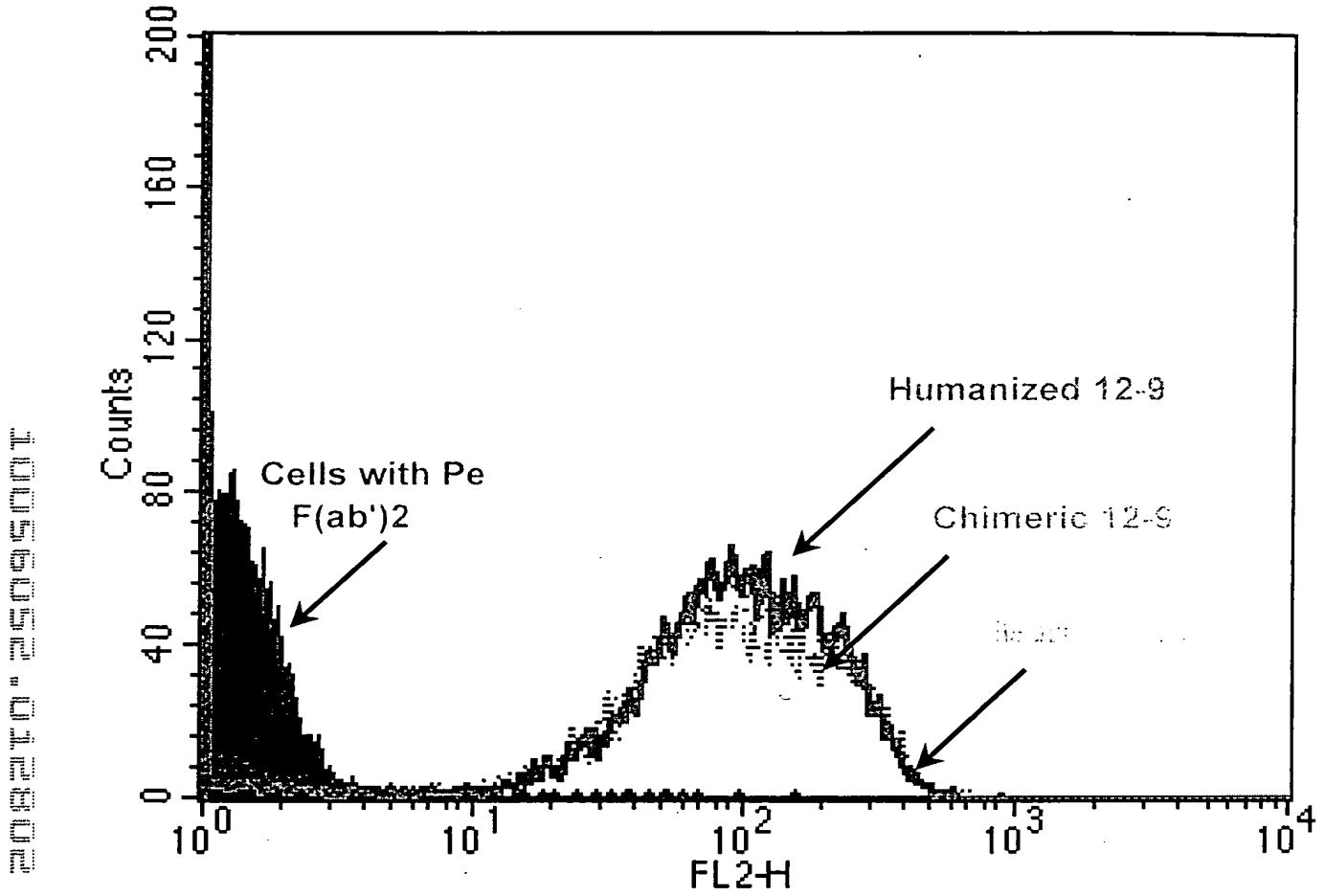


Figure 7. Comparative *S. aureus* Binding; 12-9 Murine, 12-9 Chimeric and 12-9 Humanized



This example demonstrates that humanized 12-9 can be humanized, cloned and expressed a single expression cassette capable of yields to support commercial scale quality and purity.

Variable Light Chain

Antibody	CDR 1															CDR 2							CDR 3									
1771	L	S	S	Q	S	L	L	D	S	D	G	K	T	F	L	N	L	V	S	K	L	D	S	W	Q	G	T	H	F	P	Y	T
12-9 (ClfA)	K	S	S	Q	S	V	L	Y	S	S	N	Q	K	N	Y	L	A	W	A	S	T	R	E	S	H	Q	Y	L	S	S	Y	T
13-2	K	S	S	Q	S	V	L	Y	S	S	N	Q	K	N	Y	L	A	W	A	S	T	R	E	S	H	Q	Y	L	S	S	H	T
35-006	K	S	S	Q	S	V	L	Y	S	S	N	Q	K	N	Y	L	A	W	A	S	T	R	E	S	H	Q	Y	L	S	S	Y	T
35-220	R	S	S	Q	S	V	L	Y	S	S	N	Q	K	N	Y	L	A	W	A	S	T	R	E	S	H	Q	Y	L	S	S	Y	T
Consensus	K	S	S	Q	S	V	L	Y	S	S	N	Q	K	N	Y	L	A	W	A	S	T	R	E	S	H	Q	Y	L	S	S	Y	T
	R																														H	

Variable Heavy Chain

Antibody	CDR1							CDR2																			CDR3			
1771	S	G	F	S	W	H		Y	I	H	Y	S	G	S	T	D	C	N	P	S	L	K	S				M	P	D	S
12-9 (ClfA)	R	Y	S	V	H			M	I	W	G	G	G	N	T	D	Y	N	S	A	L	K	S				K	G	E	F	Y	Y	G	Y	D	G	F	V	Y
13-2	R	Y	N	I	H			M	I	W	G	G	E	N	T	D	Y	N	S	A	L	K	S				A	Y	Y	G	N	S	W	F	A	Y			
35-006	R	Y	S	V	H			M	I	W	G	G	G	S	T	D	Y	N	S	A	L	K	S				R	L	W	Y	F	D	V						
35-220	R	Y	S	V	H			M	I	W	G	G	G	N	T	D	Y	N	S	A	L	K	S				A	Y	Y	G	N	S	W	F	A	Y			
Consensus	R	Y	S	V	H			M	I	W	G	G	G	N	T	D	Y	N	S	A	L	K	S				A	Y	Y	G	N	S	W	F	A	*	*	*	Y
	N	I						E	S																		K	G	E	F	Y	Y	G	Y	D			
																											R	L	W	Y	F	D	V					

FIGURE 8 - CONSERVED SEQUENCES
IN VARIABLE LIGHT AND HEAVY CHAINS